

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Amendments to the Specification:

Please replace paragraphs 0005, 0006, 0008, 0021, 0115, and 0232 in the published version of the pending application (Publication No. 2005/00091168), with the following amended paragraphs, respectively, wherein markings are included to show changes made (NOTE: there are no deletions, only additions identified by underlining).

[0005] The present invention provides a software licensing Application Programming Interface (API) or callable interface that provides certain licensing functions for use by software products. A license service or licensing component performs functions relating to the use of licenses, and exposes these functions to software products through the API. The service performs functions such as obtaining licenses, storing and managing licenses, protecting licenses from tampering, evaluating a license's validity, and evaluating whether a license is correctly bound to the machine and/or software product on which it is used. The software is able to make use of this functionality by calling the methods of the API.

[0006] In a typical use of the API, a software product calls an "open" API method or handle-opening component in order to obtain a unique handle that is used by the license service to identify the application. The software product then calls a "consume right" API method or right-consumption component. "Consume," in this context, means the exercise of a specified right. The call to the "consume right" method is parameterized by the software product's handle, and by the name of the right to be consumed. The license service then attempts to locate one or more valid, correctly bound licenses that contains the named right. If no such license exists, then the software product is notified of the failure. If such licenses exist, then the right is bound to one of the licenses, and the calling software product is notified of the binding. In such a case, the software product knows that the right exists, and can perform whatever functions are associated with this right.

[0008] A right may be associated with information, which becomes available after a successful call to the "consume right" method. For example, a given software product may have individual rules about when it is permissible to edit, print, save, etc., and these rules can be stored in the license that contains the right. The API provides a "get information" method or information-retrieval component that allows this information to be retrieved from the license.

[0021] The invention may be described in the general context of computer-executable instructions, such as program modules, being executed by a computer. Generally, program modules include routines, programs, objects, components, data structures, etc. that perform particular tasks or implement particular abstract data types. Various terms, including component, method, service, interface, module, routine, and program, are used interchangeably to refer to a group of computer-executable instructions stored in a computer-readable medium. The invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network or other data transmission medium. In a distributed computing environment, program modules and other data may be located in both local and remote computer storage media including memory storage devices.

[0115] The SLInitializeAsyncContext function or asynchronous-context-initiator component initializes the asynchronous context for SLC functions to make asynchronous call.

[0232] FIG. 4 shows an example process by which an application "consumes" a right. The application calls the SLConsumeRight method (402). As discussed above, the arguments to the SLConsumeRight function include the client handle assigned by the licensing service, and the name of the right (which is assigned by the vendor of the software to which the right pertains). The licensing service (service 202, shown in FIG. 2) receives the call (404). The service then locates licenses that contains the right, and checks the licenses bindings and validity. As noted

above, the license is located in the license store; if there is more than one license that pertains to the application software to which the SLConsumeRight call pertains, then a priority rule may be used to select one of the applicable licenses. Checking the binding means determining that: (1) the license is bound to the product key of the application identified by the client handle; and (2) the license is bound to the machine on which the software is running (or to the group or class of machines of which the current machine is a member). Checking validity may include determining that the right has not expired (in the case of licenses that specify an expiration date), and that the maximum number of uses of the right is not exceeded (in the case where the license specifies a maximum number of times that the right may be used (i.e., "consumed")).